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The University of Alberta

Evaluation of a Videotape Model in Teaching Assertive Behavior to Children

by

© Edward Robert Shaw

A Thesis

Submitted to the Faculty of Graduate Studies and Research

in Partial Fulfilment of the Requirements for the

Degree of Master of Education

In

Counselling Psychology

Department of Educational Psychology

Edmonton, Alberta

Fall, 1977

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Evaluation of a VTR Model in Teaching Assertive Behavior to Children" submitted by Edward R. Shaw in partial fulfilment of the requirements for the degree of Master of Education in Educational Psychology.

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Date June 21, 1977.....

A B S T R A C T

Grade seven students were shown a twenty-minute video-tape designed to teach assertive skills using a modeling procedure. Control subjects saw no film. After treatment, each subject individually entered an unobtrusive three minute test situation requiring some assertive skill to overcome interference and complete a task. Prior to entering the test situation, half of the treatment subjects and half of the control subjects were told by a second experimenter to "stand up for their rights". The other half of each group was given no special instructions.

Level of assertiveness was measured on the basis of 1. a discreet specific response (success or failure at overcoming the interference), 2. time taken to respond, 3. total response time, and 4. number of requests made for equal chances. The performance of each child was video-taped and later rated by one trained judge. One-fourth of the tapes were rated by an independent trained judge to establish reliability of the main judge.

Results of the investigation showed that neither the video-tape, the instructions nor the combination of the two affected the performance of subjects on any of the four measures. It is suggested that specific behavioral measures

are not sufficient to gauge assertiveness. Also it is suggested that other training procedures be combined with modeling to teach assertiveness.

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CHAPTER 1

Introduction

According to Albert Bandura (1969), new models of behavior are acquired and existing patterns modified in one of two ways: either by direct experience and practice of the behavior or by observing the behavior and the effects of its performance on others. The second method, which he calls observational learning or modeling, he states is an ideal one because virtually all learning that takes place as a result of direct experience can be gained on a vicarious basis through observation of other persons' behavior and its consequences for them (Bandura, 1965; Bandura & Walters, 1963). Modeling does not require the laborious acquisition of behaviors through long term shaping or trial and error, or the direct reinforcement of the learner; nor, it seems, does it necessarily require actual performance of the new behavior until the test situation occurs, some times following a lengthy period of time, wherein the new behavior is neither observed or overtly practised (Bandura, 1969).

Modeling has been shown to be instrumental in the acquisition, inhibition and disinhibition of a wide variety of responses in humans, especially those which are culturally based (ie. attitudes and values, aggressiveness, sex-role

behavior and verbalization) (Bandura, 1971, Bandura & Walters, 1963; Thomas, 1973). In children, for instance, these behaviors are very often not acquired by specific teaching but through mere observation of different kinds of behavior exhibited by models who may be adults or other children.

Modeling procedures have been effectively used in a broad variety of treatment packages (Bandura, 1969a; 1973). Bandura (1969a; 1971) points out that there are many treatment approaches in which modeling techniques, variously labelled psycho-dramatic enactment (Moreno, 1958; Sturm, 1965), behavior rehearsal (lazarus, 1966; Wolpe and Lazarus, 1966), and role-playing (Corsini & Putzey, 1957) and used to overcome specific response deficits or to transmit more extensive repertoires of social behavior. Modeling has been shown to be very effective with children in eliminating aggressive responses and some phobias (Bandura, 1971).

What constitutes "assertive" behavior is subject to a broad range of opinion and speculation. Chittenden (1942) when studying, measuring and modifying assertive behavior in young children used the following definition: assertiveness is any overt response to the "infringing" behavior of another so long as the child responding does not lose status in the interaction. Non-assertiveness he defined as immediate

compliance with another's efforts to influence or infringe upon one's behavior with a resultant loss of status in the one complying. Wolpe and Lazarus (1966) initially defined assertiveness in the following way: "Although the most common class of assertive behaviors invoked in therapeutic action is the expression of anger and resentment, the term 'assertive behavior' is used quite broadly to cover all socially acceptable expressions of personal rights and feelings" (p. 39). In 1973, Wolpe simplified his definition of assertive behavior as "the proper expression of any emotion other than anxiety towards another person" (p. 81). Rathus and Ruppert (1973) state that the assertive person will demand his or her rights and insist upon being treated with fairness and justice. That person will also be able to express likes and dislikes spontaneously, to be open and frank, and will not bottle up emotions.

McFall and Marston (1970) point out that assertiveness does not seem to exist as an isolated personality trait but rather as a "broad, nonfunctional, heterogenous, and situation-specific response class" (McFall & Lillesand, 1971, p. 314). Therefore, for the purpose of this study, assertiveness was defined operationally to be the expression of objective measurable behaviors by which one demands one's rights to be treated fairly in a specified situation wherein another infringes upon those rights.

The Nature of the Problem

The degree to which one is assertive or not directly influences his ability to relate satisfactorily with others and affects his self-esteem. Lack of assertiveness is frequently a source of referrals to psychologists in secondary schools and to university counselling centers (Rathus & Ruppert, 1973). Timid and non-assertive individuals fail to obtain fair treatment, and commonly experience anxieties during social confrontations (Rathus, 1973). Moreover, passive people will tolerate daily outrage, and will allow themselves to be shoved around and their rights to be continually treatened and violated (Moriarity, 1975). In a given situation the person acting non-assertively typically denies himself, is inhibited from expressing actual feelings, seldom achieves desired goals and, as a result, feels hurt and anxious (Alberti & Emmons, 1970). Young children as well as adolescents and adults are subject to this problem (Dorman, 1973).

The topic of assertiveness in adults has become very popular in the 70's, and an abundance of studies related to it have been published in those years. A review of literature prior to that time indicates a paucity of research on assertiveness in general. With the exception of some early work with pre-school children by Jack (1934), Page (1935), and Chittenden (1942) and more recent ones by Dorman (1973) and Rudner (1976), there has been little or no investigation into assertive behavior in children.

In summary, it has been noted that lack of assertiveness is a pressing social problem for secondary school children as well as adults, and that it affects very young children as well. Perhaps if children at all grade levels can be trained in appropriate assertive skills, many of the problems and anxieties they face now and will face in social interactions as adolescents and adults can be prevented.

Implications and Purpose of the Study

Since lack of assertiveness appears as a prevalent problem among adolescents and adults, and to a lesser degree among children, it follows that a program designed to teach the behaviors associated with assertiveness, if implemented in the early and middle grades, could do much to prevent difficulties and anxieties which these students would encounter in social interactions as they grow up. The technique used to teach assertiveness in this study was modeling. If such a program could be developed to effectively teach assertiveness both easily and quickly, it would be of great value to parents, teachers and mental hygienists alike.

In 1976, Rudner carried out a study in which he compared the relative effectiveness of three different types of short-term treatment packages in the teaching of assertive skills to Grade 6 children. One type of treatment package compared was simply the viewing of a short video tape in

which models acted assertively. In his discussion of results, Rudner points out that in the modeling situations, subjects may have "acquired" assertiveness but failed to "perform" it. This confusion might have been overcome by having subjects tested under both maximum cue situations (in which they are encouraged to be assertive) and minimum cue situations (in which they receive no special instructions). The comparison of the treatment group under both maximum and minimum conditions will answer the questions as to whether subjects learned the skills taught on the modeling tape, and if they learned the skills, whether they chose to practice them.

The general purpose of this study was to investigate the effectiveness of a twenty minute modeling tape in teaching assertiveness skills to junior high school children (Grade 7) over a short period of time.

More specifically, the study was designed to see if viewing the film and hearing a short verbal commentary would make a difference to the degree of assertiveness in Grade 7's as measured by certain behavioral criteria used for this study. In addition to this, the effectiveness of telling students to act assertively (ie. stand up for their rights) just prior to entering the test situation was examined. Another purpose of the study was to see whether there are any differences in the level of assertiveness of male students and female students and whether more assertiveness is shown in same sex or opposite

sex dyads. The dependent variables were much the same as those used in the Rudner (1976) study and are described in Chapter III.

Limitations of the Study

A. In this study, learning occurred over a short period of treatment time (approximately 20 minutes). The study is not designed to demonstrate the permanence of the treatment or its long-lasting effects. It is assumed, however, that with significant treatment effects, additional repeated exposure to such a situation may prolong the the effects over time.

B. In this study, the treatment was used with the total population of Grade 7's in one school. No claims are made as to the representativeness of this population to the larger populations of Grade 7's in the Edmonton area or to groups of children who may be particularly low in assertiveness.

C. In this study, no claims are made regarding the representativeness of this population to other children or to the population of Grade 7's in the Edmonton area with respect to sex differences in assertiveness.

D. In this study, no claims are made regarding the relative effectiveness or importance of individual components in the modeling process. Only overall effects are measured.

Overview of the Study

Chapter I introduces the topic of this study, setting out its purpose and importance as well as its limitations. Chapter II is a review of the literature relevant to the study, including research on modeling in assertive training. Chapter III describes in detail the actual procedures employed in the experiment. The hypotheses are also included here. Chapter IV is an analysis and discussion of the data obtained, and Chapter V consists of a summary of results, conclusions and suggestions for further study.

C H A P T E R II

Review of Related Literature

A. Uses of Modeling

Numerous studies have demonstrated the phenomenon of vicarious reinforcement (eg., Bandura, 1965; Bandura, Ross, & Ross, 1963b; Walters & Parke, 1964). Effects are shown when the behavior of observers is modified as a function of their having watched reinforcing stimuli being administered to models. A number of different kinds of behavior (often in children) have been shown to be modified by the modeling process. Some of these are stylistic response patterns (Bandura, Grusec, & Menlove, 1966; Bandura, Ross, & Ross, 1963c), distinctive modes of aggressive behavior (Bandura, Ross, & Ross, 1963a; Collins, 1973; Davids, 1972; Grusec, 1973; Hicks, 1965; Kuhn, Madsen, & Becker, 1967; Noble, 1973), dramatic play patterns (Marshall & Kahn, 1967), prosocial frustration reactions (Chittenden, 1942), facial expressions (Hamilton, 1973), commodity preferences (Speigler & Liebert, 1973), teachers' preferences and behaviors (Feshback & Feshback, 1972; Portuges & Feshback, 1972), social interactions (O'Connor, 1972), and picture preferences (Jeffrey, Hartman, & Gelfand, 1972).

Other more complex types of behavior which have been shown to be changeable through modeling are self-reinforcement

standards and self-evaluative responses (Bandura & Kupers, 1964; Bandura & Whalen, 1966; Bandura, Grusec, & Menlove, 1967; Denney, 1975; Kunce & Thelen, 1972), conceptual behavior and formation (Flanders & Thistlewaite, 1969; Reed, 1966; Zigler & Yando, 1972; Zimmerman & Rosenthal, 1972), perceptual judgments (Davidson & Liebert, 1972), performance of information - processing acts (Goodman, 1975), moral judgment orientations (Bandura & McDonald, 1963; Keasey, 1973; Prentice, 1972; Sarasan & Ganzer, 1973; Turiel & Rothman, 1972), altruism (Bryan & Walbek, 1970; Midlarsky, Bryan, & Brickman, 1973; Morris, Marshall, & Miller, 1973; Yarrow, Scott, & Waxler, 1973), self-imposed delay-of-gratification patterns (Bandura & Mischel, 1965), linguistic structure (Lovaas, 1966), and vocal and linguistic responses (Harris & Hassemer, 1972; Hursh & Sherman, 1973).

Modeling and modeling procedures play a central role in a broad variety of treatment programs (Bandura, 1969a, 1971, 1973). Some examples include the use of modeling in language therapy (Yudkovitz, Rottersman, & Lewinson, 1975), alcohol rehabilitation (Greer & Callis, 1975), resocialization of adult schizophrenics (Edelstein & Eisler, 1976), and modification of explosive outbursts in adults (Foy, Eisler & Pinkston, 1975).

B. Variables in Modeling

Bandura (1969) makes a distinction between 'acquisition' and 'performance'. A behavior may be acquired as evident in verbal responses (replicated symbolically) even when the behavior is not imitated exactly as modeled. Furthermore, whether or not the behavior is acquired depends upon a number of variables. He suggests that there are four component processes governing observational learning in the social learning analysis: attentional processes (relating both to external stimuli as well as observer characteristics); retention processes (symbolic coding, cognitive organization, and symbolic rehearsal); motor reproduction processes (physical capabilities, self-criticism and feedback); and motivational processes (reinforcement) (Bandura, 1977). Numerous studies have concentrated on determining which variables will influence the performance of matching behavior.

Characteristics of the Model

The characteristics of the model have been found to affect the modeling process. Models who demonstrate a high degree of competence (Gelfand, 1962; Mausner, 1954a, b; Mausner & Block, 1957; Rosenbaum & Tucker, 1962), who are purported experts (Mausner, 1953) or celebrities (Hovland, Janis, & Kelley, 1953), and who possess status-conferring powers (Lefkowitz, Blake & Monton, 1955) are likely to influence the behavior of observers more than models who are lacking in these qualities. Other general model

characteristics which seem to be influential are age (Bandura & Kupers, 1964; Hicks, 1965; Jakubezak & Walters, 1959), sex (Bandura, Ross, & Ross, 1963a; Maccoby & Wilson, 1957; Ofstad, 1967; Rosenblith, 1959, 1961), social power (Bandura, Ross, & Ross, 1963c; Mischel & Grusec, 1966), and ethnic status (Epstein, 1966).

Model Similarity

The similarity of model to observer has been shown to influence attitude and preferences (Bandura, 1969a; Kanfer & Phillips, 1970; Mischel, 1971). Hirshman and Katkin (1971) found increased galvanic skin response activity with increasing self and model similarity, thus pointing out the importance of the subject's perception of the model's similarity to himself in the modeling process. Kazdin (1973) found that "coping" models (who display anxiety in initial approach to a task but eventually succeed) were more influential in reducing fear of snakes than "mastering" models (who are confident and at ease from the beginning), thus suggesting the impact of model-to-observer similarity. McAllister (1973) found evidence to refute this when high status models affected undergraduate subjects more than peer models. Bandura and Barab (1973) found equal improvement in both similar and non-similar groups.

Adult Versus Peer Models

In studies investigating the effects of modeling with

child observers, peer models have been shown to have significant effects upon children's subsequent behavior (Bandura, Grusec, & Menlove, 1967; Bandura, Ross, & Ross, 1963a, c; Clark, 1965; Hartup & Coates, 1967). Adult models, however, have been shown to be more influential than peer models in elementary school children for certain types of behavior (Bandura & Kupers, 1964) especially adult male models (Bandura & Kupers, 1964; Bandura, Ross, & Ross, 1961, 1963a; Rabenstein, 1973). Observation of children's role playing behavior would seem to substantiate the fact that responses observed in adults are imitated by children in a variety of contexts (Hartup, 1964; Levin & Sears, 1956; Maccoby, 1959; Sears, Rau, & Alpert, 1965). While Bandura and Kupers (1964) have found adults to be more influential than peers, others (Hicks, 1965; Millsom, 1966; Musselman, 1968) have noted few adult-peer differences and/or unpredictable interactions with other variables. O'Connor (1967) found greater imitation of adults by children but a significant effect was also observed with peer models.

By the age of seven, children generally interact with peers as much as they do with adults (parents, neighbors and teachers) (Bandura, 1969b; Barker & Wright, 1955; Wright, 1967). O'Connor (1967) suggests that the relative influence of adults and peers at various age levels may be partially a function of the type of behavior in question, for example, academic, social or athletic. Thus, in matters of academics

or moral judgments, adults are apt to be imitated more; whereas, in style of dress, preference of music, choice of classroom leaders, etc., peers may be more influential even in children as young as seven or eight (Dor & Fey, 1974).

Sex of Model

Friedman (1972) points out that there have been practically no studies investigating the importance of the sex of the experimenter, models, subjects and role players or how they interact with each other. At the same time he notes that sex may be an important variable in modeling effectiveness. One study (Grusec & Brinker, 1972) found that with elementary school children, boys learned more about the behavior of same-sexed models than opposite-sexed ones. Girls, it was found, showed less reliable but similar trends. The authors suggest that since children are ordinarily reinforced for imitating like-sex models, it is to their advantage to learn as much as is possible about the behavior of like-sex models and thus, the tendency for like-sex imitation.

Consequences to the Model

The consequences to the model in most studies usually consist of the attainment of some reward, achievement of a favorable judgment or the avoidance of punishment or other unfavorable consequences. It is one assumption of modeling

that the subject when viewing the model will be given the set of expectations that his engaging in similar behaviors will produce like results for him. Bandura (1968) and Bryan (1972) have both discovered that positive consequences to a model produce like consequences to the viewer. Masters, Gordon, & Glark (1976) found that children who observed models receiving externally or self-dispensed rewards showed increased imitation. In the same study, subjects who saw models punished contingently showed reduced imitation and increased oppositional imitation but only when the punishment was externally administered. In a review of literature concerning the effects of vicarious reinforcement on imitation, Thelen and Rennie (1972) state that a substantial number of studies have failed to demonstrate an increase in imitation as a function of vicarious reward. They do, however, qualify this criticism by suggesting that subjects most often see value in the assigned task and the reinforcement seems to be of little additional value to them.

Presentation of Model

There has been a great deal of discussion in the literature regarding the manner in which the model is presented. Several studies have shown a filmed or video-taped model to be effective (Bandura & Menlove, 1968; Bryan & Walbek, 1970; O'Connor, 1969, 1972; Stein & Bryan, 1972; Wolf & Cheyne, 1972). In fact, Lanthorn, Pasewark and Rardin (1975) found a video-taped model to be superior to a live model either in the same

room or in the next room behind a one-way mirror in getting subjects to give self-administered shocks. Eisler, Hersen, & Miller (1973) point out that the filmed or video-taped model has several advantages over live or audio-taped model. First, the model can practise and re-do his responses until all the effective components of the behavior in question are contained in the presentation. Second a filmed or video-taped model can be presented to one subject repeatedly or to several subjects over a period of time without variation in the modeling stimulus.

Bandura (1970) suggests that live or film performance of a model is not an essential component of modeling, since modeling refers to the cognitive and representational processes which guide behavior rather than the mode through which modeling information is transmitted. Indeed models have been presented with success in a covert rather than overt manner (Kazdin, 1973, 1974, 1976a, 1976b; Thase & Moss, 1976). In covert modeling, subjects are asked to imagine, rather than hear or view, scenes in which a model acts assertively. In a recent review of literature, Cautela (1976) concludes that covert modeling procedures are at least as effective as overt ones. Covert modeling has several advantages over other modeling procedures in that it does not require the use of bulky and costly equipment and space; the therapist has greater control insofar as the imagined model's behavior and its consequences are concerned; and

stimuli which are distracting and non-essential are eliminated.

Observer Characteristics

Not only are models differentially effective, but observers also differ in their susceptibility to modeling influences. Persons who have been frequently rewarded for imitative behavior (Masters & Morris, 1970; Miller & Dollard, 1941), and those who lack self-esteem (deCharms & Rosenbaum, 1960; Gelfand, 1962), who feel incompetent (Kanareff & Lanzetta, 1960), and who are highly dependent (Jakubzak & Walters, 1959; Kagan & Massen, 1956; Ross, 1966) are especially prone to pattern their behavior after successful models. Similarity between observers and models in age (Hicks, 1965), sex (Bandura, Ross, & Ross, 1963a; Grusec & Brinker, 1972; Maccoby & Wilson, 1957; O'Sullivan, et. al., 1973), socioeconomic and racial status (Beyer & May, 1968), as well as on other dimensions has likewise been shown to facilitate imitation. In addition to this, motivational variables and transitory emotional arousal significantly alter perceptual thresholds and in other ways facilitate, impede and channel observing responses in the subjects (Bandura & Rosenthal, 1966; Easterbrook, 1959; Kausler & Trapp, 1960). Rudner (1976) points out the difficulty of determining solely from performance measures if the effects of observer characteristics are reflective of differences in degrees of observational learning or differences in willingness to

perform what has been learned.

C. Assertiveness Training

Although there has been an increasing amount of literature regarding assertiveness training since it was developed by Salter (1950), most of the work has been with college students and adults (eg. Hedquist & Weinhold, 1970; McFall & Marston, 1970; Friedman, 1972; Hersen, et. al., 1973). Very little work has been done with the pre-adolescent and early adolescent child (eg. Ross, Ross, & Evans, 1971; Patterson, 1972).

Assertiveness training has received considerable attention in the area of behavior therapy (eg. Salter, 1949; Wolpe, 1958, 1973, 1976; Wolpe & Lazarus, 1966) where the therapist attempts to directly shape assertive responses. The components of assertiveness training have received considerable attention (Eisler, Hersen, & Miller, 1973; Friedman, 1971; Hersen, Eisler, & Miller, 1973; McFall & Lillisand, 1971; McFall & Marston, 1970; Rathus, 1972). It does not seem to matter which type of treatment is employed (modeling, role-playing, behavior rehearsal, performance feedback and instruction) as all produce superior results to control procedures.

Assertiveness seems to be a coordinated combination of several verbal and non-verbal responses (Eisler, Hersen,

Miller, & Blanchard, 1975; Sansbury, 1974). Eisler et. al. (1975) not only demonstrated the complexity of the behavior known as "acting assertively", but also pointed out that assertiveness seems to be stimulus-specific, i.e. it may occur when the individual is in one interpersonal context and not occur in another.

Wolpe (1973) contends that assertive responses are incompatible with anxiety and that they are effective in overcoming neurotic fear. Ornstein, Ornstein, and Carr (1975) investigated the relationship between anxiety and assertiveness and found a highly significant inverse correlation. They conclude that anxiety reducing procedures such as desensitization or relaxation, if used in tandem with assertiveness training, would increase its overall effectiveness.

D. Modeling in Assertiveness Training

Modeling can and has been used extensively to teach assertive behavior (Bandura, 1973) and as a remediatory program for assertive behavior deficits (Bergin & Suinn, 1975). The effectiveness of the modeling technique as a therapeutic procedure for teaching assertive-behavior has been shown with adults, hospitalized patients, and college students (Edelstein & Eisler, 1976; Eisler, Hersen, & Miller, 1973; Friedman, 1971; Goldstein, Martens, Hubber, Van Belle, Schaaf, Wiersma, & Goedhart, 1973; Kazdin, 1974, 1976a;

Longin & Rooney, 1975; McFall & Lillesand, 1971; Young, Rimm, & Kennedy, 1973). It has also been employed with normal children (Jakibchuk & Smeriglio, 1976; Masters, Gordon, & Clark, 1976; Rudner, 1976) and emotionally disturbed children (Goodwin & Mahoney, 1975). Types of models used have been live (Friedman, 1971), film/videotape (Eisler, Hersen, & Miller, 1973; Rathus, 1973), audiotaped models (Goldstein, et. al., 1973; McFall & Lillisand, 1971) as well as covert (imagined) models (Kazdin, 1974, 1976).

E. Conclusions

Several conclusions drawn from the literature are relevant to this study:

1. The power of a model to influence the behavior of children as well as adults has been amply demonstrated.
2. Modeling procedures have been used effectively in assertion training.
3. The effectiveness of the modeling process is dependent upon a number of variables which include model characteristics, model reinforcement, observer characteristics, and attention to relevant cues in the modeled and test situation.
4. Multiple models are important to a child's social learning.
5. Adult and peer models are both influential in changing the behavior of children.
6. There is a discrepancy between acquisition of a behavior and its performance.

The film by Rudner which was chosen for use in this study incorporates several of the variables which the literature indicates are influential in the modeling process. The film includes multiple models, two adults (one male and one female) and two children of about the same age as the subjects (again, one male and one female). Each model interacts assertively in two scenes, once with a same-sex actor and once with one of opposite sex. Each model is reinforced for acting assertively by obtaining the natural and logical consequences of standing up for their rights. Thus, the film controls very well for age and sex characteristics of the models. In addition, the models' status is not indicated by the film, so it is expected that this will not be a significant influence.

Since there are numerous variables that can affect the outcome of a study such as this, care will be taken to randomly account for as many factors as possible (other than the major independent variables of differential instruction and treatment). Subjects will be randomly assigned to the four experimental groups. In this way, such factors as sex of subject, sex of confederate, ethnicity, age, intelligence, social status, reinforcement history for assertive behavior, etc., should be controlled for.

C H A P T E R III

Methodology and Design

A. Overview

In order to test the effectiveness of a video-tape designed to model assertive behavior, 85 subjects were randomly assigned to one of four groups. One group was shown the film and then tested under conditions where they had been instructed to act assertively; a second group was shown the film and given no special instructions; a third group saw no film but were given instructions to act assertively in the test situation; and the fourth group neither saw the film nor were they given any special instructions.

B. Sample

Subjects selected for the study were all those Grade 7 pupils at Holy Cross School whose parents had not objected to their child's participation in the study. A letter explaining the study and asking parents to signify if they did not want their child to participate was sent out approximately one month before the study was to take place (see Appendix A). Five letters were returned stating that those parents refused to let their children be involved. 85 subjects were selected (44 boys and 41 girls) and randomly assigned to treatment groups and test conditions. Ages of subjects ranged from 12 years 1 month to 15 years 2 months

(mean 12 years 10 months) at the time of the experiment which was in mid-March. Grade 7 was chosen for the sample because it is near in age to those subjects used in the Rudner study and because there were sufficient students in that grade to make up an adequate-sized sample.

The school chosen for the study is a Catholic School having grades 1 through 9. The junior high section serves a broad area of the city, being fed from several smaller elementary schools. It includes in its population children from families of low to upper-middle class socio-economic status. Of the approximately 350 students in grades 7 to 9, about 40 - 50 are of native or metis descent. These come from families living within the city limits covering a broad range of the socio-economic spectrum. In addition, 25 students are bused to the school from the Enoch Reservation just outside the city.

C. Research Design

A posttest-only control group design was used in this study. This design was chosen in order to eliminate the possibility of task learning through pre-testing (Campbell and Stanley, 1966). Subjects were randomly assigned to both treatment and test conditions. The following table shows the number of students in each group.

Table 1

Assignment of Subjects
to Treatment Groups and Test Conditions

Group	N
A (Modeling/Maximized Cues)	22
B (Modeling/Minimized Cues)	21
C (Control/Maximized Cues)	21
D (Control/Minimized Cues)	21
TOTAL	85

D. Description of the Modeling Video-tape

The modeling video-tape used in the treatment is one which was prepared by Rudner (1976) for use in a doctoral dissertation. It consists of a series of 8 situations in which the model exhibits a high degree of assertiveness in standing up for his or her rights. Two adult models and two peer models appear (1 man, 1 woman, 1 boy, 1 girl). The two peer models and other role players in those sequences are of approximately the same age as the subjects who viewed the video-tape for this study. The four models all display those specific behaviors which were found to be related to judgments of overall assertiveness in a study by Eisler, Miller, and Hersen (1973). These behaviors

include duration of responses, face-to-face contact, content requesting new behavior, and loudness of speech. In subsequent studies Eisler, Hersen, and Agros (1973a, b) found that level of affect as displayed by tone of voice seemed to be a reliable indicator of assertiveness.

Included in the eight different scenes are two with male models and male role players, two with female models and female role players, two with male models and female role players, and two with female models and male role players, thus controlling for the sex effects of the models. The tape includes a title for each scene, a brief narration, and the action. Total time of actual action is approximately 13 minutes (scenes range from 1 to 1 3/4 minutes; mean about 1 minute, 35 seconds).

The eight scenes in order of their presentation are:

a. The lunchroom: boy squeezing in line in front of another boy at a Coke machine;

b. The movies: man cutting in front of another man in a movie line-up;

c. The gym: girl losing her basketball to a boy in the gym;

d. The concert: man taking a lady's seat at a concert;

e. The school hallway: girl wanting to copy another girl's math homework before class;

f. The bookstore: lady being short-changed by a lady clerk in a bookstore;

g. The library: girl talking loudly and disturbing a boy in the library; and

h. The restaurant: waitress bringing a man a sandwich instead of the steak which he ordered.

The following is an example of the narration and verbal exchanges in one of the situations:

The Lunch Room

Tony is having lunch at this school lunch room. He's getting thirsty, and realizes he doesn't have anything to drink with his lunch. He looks at the Coke machine, and sees a long long-up in front of it. He leaves the table to go over to buy a nice, cold pop.

He's in a hurry because he has to leave soon, but since there's a long line-up in front of him he has to wait. As he's waiting in line, this other student comes along and squeezes in line in front of him without asking.

Model: Hey Rob, this is a line and I was here before you. Could you please go to the back of the "bus"?

Rob (pointing to the girl ahead of him): But I thought she was at the end of the line.

Model: No she wasn't. I was here before you. I've been here for quite awhile now.

Rob: Well there's lots of people ahead of us. One person doesn't matter. Mind if I cut in?

Model: Yes I do mind. It's not fair you know. I'm quite thirsty and I am in a rush.

Rob: C'mon, you're my friend.

Model: Well it doesn't matter Robert - there's other people waiting longer than you. Same with me.

Rob: I'm thirsty!

Model: Sorry. You'll have to go to the back of the "bus".

Rob: OK (and goes to the end of the line).

E. Nature of Treatment

Treatment Group

All subjects in the treatment group were shown the modeling tape in groups of 4. Before the video-tape was shown to subjects, live instructions and an introduction were given:

"You are going to see some short scenes where two people at a time are interacting with each other. These scenes are examples of situations that could happen to anybody, anywhere. The boys and girls that you will be seeing in the film are just like you. They are about the same age as you but are from a different school. The men and women in the film could be like your parents, your teachers, any other adults you know, or perhaps even you when you grow up.

Listen and watch carefully what happens each time. Notice especially how one person stands up for their rights to get his or her way."

Following these verbal instructions, the video-tape was shown with breaks following the first four scenes during which a verbal commentary was read. This commentary was so constructed as to call the subject's attention to those behaviors performed by the models which were assertive and pointed out the rewards which the model received for acting assertively. For example, this commentary went with scene 3 in the gym:

"In the following scene notice how the girl stands up for her rights by calmly and clearly telling the boy that the ball he has is hers. When he tries to keep the ball she insists that it is hers and in the end she does get her ball back".

After the video-tape was finished it was pointed out to the subjects once more that the models "did not allow themselves to be taken advantage of and got what they wanted" (i.e. were reinforced). Three particular behaviors were enumerated as being effective in attaining that reinforcement: 1. Models remained calm; 2. they clearly stated what their rights were; and, 3. they persisted in making their demands. Following this, subjects were all taken to a waiting room from where they were taken individually to the test room.

Control Group

Subjects were placed immediately in a waiting room from where they were taken individually to the test room. Following the completion of testing, control subjects were taken to the viewing room where they saw the same film and heard the same commentary as the treatment group had earlier.

F. Experimental Setting and Procedure

Treatment

Subjects received treatment and were all tested at the school. They were called from their classrooms in groups of eight to the area where the experiment was to take place. At this point, they were assigned to treatment condition and to test condition. Those four who were to receive treatment were immediately taken to a room where they viewed the videotape and heard the verbal commentary. The four assigned to the control condition were taken to a waiting room from where they were escorted individually to the testing room.

Testing Procedure

After subjects were placed in the waiting room (the treatment group had seen the film; the control group had not) another experimenter (an adult female) entered the room and explained to the group of subjects (see Appendix B) that she was interested in studying and comparing Grade 7 and 8 students' performance on doing a written maze puzzle. They would only

have up to three minutes to work on the task. While they waited their turns, a practice maze (Appendix C) was handed out for them to try.

After being given a chance to practise on the maze, each subject was taken individually by the female experimenter to the test room. Subjects waited in the waiting room anywhere from two to twenty minutes. For all groups, subjects were selected randomly for their specific testing times.

Maximal Cue Condition

Subjects from both treatment and control groups who were assigned to this condition were given the following instructions after having left the waiting room and before entering the testing room: Remember that it is important that you finish the puzzle and do it as quickly as possible Now if you're interfered with in any way, be sure to stand up for your rights and do what you have to in order to finish, okay? Good Luck.

Minimal Cue Condition

Subjects from both treatment and control groups who were assigned to this condition were given these instructions after leaving the waiting room and before entering the testing room: Remember that it is important that you finish the puzzle and do it as quickly as possible.

Now remember what I said about not telling anybody about what happens in this room, okay? Good luck.

The test situation itself consisted of a direct intentional incident between the subject and a confederate in which the subject was required to demonstrate some assertive skills in order to overcome some interference and complete a task. It was necessary to keep the subject unaware of the fact that he was being tested for assertion (even though those subjects in the cue maximizing group had been told to "stand up for your rights"); otherwise subjects might try to perform as expected by the experimenter. An attempt was also made to conceal the video-taping apparatus from the subjects to reduce the possibility of test anxiety and to prevent them from guessing the real purpose of the testing situation. The unit, consisting of a camera, microphone and a video-tape recorder was placed in a 5 foot wooden box constructed specifically for the purpose of unobtrusive video-recording. Although some subjects were somewhat suspicious that they were being taped, this was neither confirmed or denied by the experimenters and most subjects did not give any indication that they thought they were being recorded.

The subject was met at the test room by either a male or female Grade 8 confederate student who alternated after two successive test situations. The experimenter

seated both across from each other at a large table and handed out the test mazes (Appendix D) with pencils. She gave the subject a pencil with an eraser on it, and to the confederate she gave one without an eraser. Then she read the directions on the maze to both of them, answered any questions which they might have asked, started her stop watch and left the room.

Following this, the confederate worked on the maze for about 30 seconds and then intentionally made an error on his puzzle. He looked up to the subject and asked if he could borrow the subject's pencil "for a second" to erase his mistake. If the subject refused, the confederate was to persist for four requests and then give up. If the confederate did get the pencil, he was to erase for about 15 seconds and then continue working on the maze with the subject's pencil thus leaving the subject with no pencil. It was now necessary for the subject to assert himself in order to get the pencil back and complete the task. In order to establish a measure for the "persistance" variable the confederate was instructed to resist or ignore requests to return the pencil unless the subject left his chair to get the pencil back.

All behaviors in the test situation were recorded on video-tape for later judging. Subjects' responses were video-taped to permit the judge to respond to visual

as well as audio cues in making behavior ratings.

Interview and Questionnaire

Following the test situation, each subject was interviewed to obtain his feelings about the test and to determine how aware he was of the true purpose of the study. First he was asked how he felt about what happened during the test, as well as how he felt about the grade 8 with him. This question was followed by: "Was there anything more to the test than what you were first told? Was there more to it than just doing a maze?"

In addition, a questionnaire was administered orally to each subject (Appendix E). This was to determine if the child was aware of an appropriate assertive response in similar situations where they might have to stand up for their rights. Thus, bu their choice of response, an indication would be given if the child knew what he "ought" to do. This was used as a further check to determine the cognitive acquisition versus performance difference between and amount the treatment groups. If the subject had acquired the necessary assertiveness skills but had not performed them in the test situation, this questionnaire would make this apparent.

Following this, each subject was reassured that the Grade 8 had only been doing what he or she was asked to do. Also, the subject was asked not to tell anyone what he had

seen or done, and was sent to another waiting room where they waited until the group of four was finished. After this they were sent back to the classroom.

Summary of Experimental Procedure

Treatment Group

(1) treatment -- 16 minutes
(2) escort to test room with differential instructions -- 1 minute
(3) test period -- 3 minutes
(4) interview and questionnaire -- 3 minutes

Control Group

(1) escort to test room with differential instructions -- 1 minute
(2) test period -- 3 minutes
(3) interview and questionnaire -- 3 minutes
(4) treatment film -- 16 minutes

G. Outcome Measures

Eisler, Hersen, and Agras (1973a, b) when working with psychiatric patients discovered that the more assertive ones exhibited shorter response latencies (time taken before first response), louder speech, longer speech duration, greater affect (tone of voice), less compliance, and more requests for changes in the other than the unassertive ones. Eisler, Hersen, and Miller (1973) obtained similar results in another study. In his pilot study, Rudner (1976) found that specific response measures, such as response latency, response duration and total response time plus the specific discreet response of whether or not the subject

got the pencil/eraser back were highly sensitive in discriminating between treatment and control groups.

Components of assertiveness chosen for observation in this study were defined for judging as follows:

1. response latency: The elapsed time in seconds from when the subject gives his pencil to the confederate until the subject first asks for it back or makes a comment that the situation is unfair.
2. total response time: Total time from when subject first gives up the pencil until he gets it back.
3. number of requests: The number of requests that the subject makes of the confederate to return his pencil. Also scoreable were any statements referring to the subject's right to a fair and equal chance to complete the task.
4. gets pencil/eraser back: Success or failure in getting the pencil/eraser back.

In summary, greater assertive behavior would be associated with shorter response latencies, less total time, more requests and getting the pencil back.

H. Behavior Ratings

All behavioral ratings were made by one judge who observed the video-tapes made of the test situation in a random order. The rating form used for rating the tapes appears in Appendix F.

As a check for the reliability of this judge, a second judge was asked to rate 22 incidents. Correlations and percentage of agreeing responses are found in Table 2.

Table 2

Reliability Check on Judge for Behavioral Ratings

(number of situations = 22)

Measure	r	% Agreement
latency of response	.979	
total time	.979	
number of requests	.915	
gets pencil back		100

Scoring

Success or failure to get the pencil back was scored 1 or 0, respectively. All other measures of subject performance were obtained by taking the raw value of the various measures. Mean scores were then used to measure differences between the groups for each particular measure, except for the tallied (specific) response which was compared using composite group scores.

G. Hypotheses

The Hypotheses based on the various outcome measures follow. Specific null hypotheses will be reported along with related analysis in chapter IV.

I(a). There will be no difference in scores between groups who were shown the film and groups who were not shown the film with respect to number of requests, response latency, total response time and getting the pencil back.

I(b). There will be no difference in scores between groups who were told to "stand up for their rights" in the testing situation and groups who were given no special instructions.

II. There will be no difference in scores between male and female subjects who were paired with same-sex and opposite-sex confederates.

III. There will be no difference in scores between male and female subjects who were shown the film, and male and female subjects who were not.

IV. There will be no difference in scores between male and female subjects who were told to "stand up for their rights" in the testing situation, and male and female subjects who were given no special instructions.

CHAPTER IV

Results and Discussion

Eighty-five subjects were selected to participate in the study. During the experiment three boys (two from the CONT/MAX group and one from the MOD/MAX group) and two girls (one from the MOD/MIN group and one from the CONT/MAX group) found an extra pencil to use in the test situation, and thus were eliminated from the analysis. Also three boys (all from the CONT/MAX group) were excluded because they refused to give up their pencils. They were excluded because such behavior could be construed as aggressive rather than assertive depending on its motives and manner of delivery. In addition to this, three girls (two from the MOD/MAX group, one from the MOD/MIN group) and two boys (one from each of the MOD/MAX and MOD/MIN groups) were eliminated due to technical difficulties experienced with the video-tape equipment. Consequently the MOD/MAX group was left with 18 subjects (13 boys, 5 girls); the MOD/group with 18 (7 boys; 11 girls); the CONT/MAX group with 15 (3 boys; 12 girls); and the CONT/MIN group with 21 (13 boys, 8 girls).

The data accumulated in the post-treatment test was subjected to statistical analysis to ascertain the tenability of the major hypothesis that:

1. there would be no significant differences between the treatment group and the control group on any of the

outcome measures, and;

2. there would be no significant difference between the maximized test condition and the minimized test condition.

The data was further analyzed to determine if boys and girls would be differentially affected by the treatment conditions, the test conditions and the factor of whether the confederate, with whom they were required to be assertive, was a boy or girl.

A. Analysis of Data

In accordance with the four hypotheses to be tested, two-way analyses of variance was performed to see if the groups differed on the variables: number of responses, response latency, and total time. To examine the specific response measure (success or failure at regaining the pencil) a three-way chi square test for independence (Winer, 1971) was performed.

A level of significance of .05 was chosen as being necessary to reject the null hypothesis. Where the interaction was non-significant, it was assumed that the effects of the two variables were additive and analysis of variance was carried out. When the F-test for the interaction was significant, a Scheffé Multiple Comparison of Means Test (Scheffé, 1959) was applied. Ferguson (1971) suggests that since the Scheffé procedure is more rigorous than other procedures, and will therefore lead to fewer sign-

ificant results, "...the investigator may choose to employ a less rigorous significance level in using the Scheffé procedure: that is, the .10 level may be used instead of the .05 level" (p. 271). In keeping with Ferguson's suggestion, the .10 level was used in this analysis.

B. Hypothesis and Findings

At the conclusion of the test situation, subjects were asked whether they thought there might have been more to the test situation than what they were first told. Only 4 answered in the affirmative but they were unable to describe the outcome measures.

This section includes the stated null hypotheses and a discussion of the results of the analyses for each hypotheses.

Hypothesis I

(a) It was hypothesized that there would be no significant differences between groups who were shown the video-tape and groups who were not shown the video-tape with respect to the four measures: number of requests, response, latency, total time and success or failure at getting the pencil back.

(b) It was further hypothesized that there would be no significant differences between groups who were told to stand up for their rights and groups who were given no special instructions with respect to those measures.

A summary of the analyses is presented in Tables 3a to 3e. Table 3a reports means and standard deviations of the two conditions compared for the three measures: number of responses, response latency, and total time. Tables 3b, 3c and 3d report results of the two-way ANOVA performed on each measure.

Since it is assumed that the modeling treatment and the maximized conditions would lead to more assertive responses, a one-tailed test was used in determining the level of significance and those probabilities are reported in the tables. Table 3e reports frequencies for the specific measure (success or failure). Analysis of results reported in Table 3e using a three-way chi square test for independence indicated that there were no significant deviations of actual frequencies of success or failure from the expected frequencies in each cell in the testing of this or the other three hypotheses. This order of presentation of tables is repeated for each of the subsequent analysis.

On the basis of the reported analysis, hypothesis I (a) & (b) was not rejected. That is, the groups were not found to be significantly different on the measures of number of responses, response latency, total time and success or failure at getting the pencil back.

Table 3a

Means, Standard Deviations Comparing Treatment (Modeling or Control) and Testing (Maximum or Minimum) Conditions for Measures: Number of Responses, Response Latency, and Total Time

Condition	N	Measure					
		# Responses		Latency		Total Time	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
MOD/MAX	18	3.17	1.89	34.22	35.03	87.14	43.43
MOD/MIN	18	2.50	2.48	30.79	25.57	83.01	39.11
CONT/MAX	15	3.87	2.61	35.95	33.99	87.83	36.67
CONT/MIN	21	4.00	4.79	39.98	34.71	93.46	35.72

Table 3b

Summary of Two-Way Analysis of Variance Comparing Treatment and Test Conditions on Measure: Number of Responses

Source	df	MS	F	P
A (Treatment)	1	6.25	0.600	0.22
B (Test)	1	0.98	0.094	0.38
Error	69	10.42		

Table 3c

Summary of Two-Way Analysis of Variance Comparing Treatment and Test Conditions on Measure: Response Latency

Source	df	MS	F	P
A (Treatment)	1	640.22	0.429	0.26
B (Test)	1	1.11	0.001	0.49
Error	69	1050.54		

Table 3d

Summary of Two-Way Analysis of Variance Comparing Treatment and Test Conditions on Measure: Total Time

Source	df	MS	F	P
A (Treatment)	1	640.22	0.429	0.26
B (Test)	1	8.25	0.006	0.47
Error	69	1490.02		

Table 3e

Contingency Table for Comparison of Treatment (Modeling or Control) and Test (Maximum or Minimum) Conditions on Measure: Getting Pencil Back

	Test Conditions	
	MAX	MIN
MOD success	8	12
failure	10	6
Treatment		
CONT success	8	9
failure	7	12

Hypothesis II

It was postulated that there would be no significant differences in scores between male and female subjects who were paired with same-sex confederates and males and females who were paired with opposite-sex confederates.

A summary of the results and analyses is presented in Tables 4a to 4e. Probabilities are reported for a two-tailed test as it could not be predicted how the sex of the confederate would affect the performance of subjects. On the basis of the results of these analyses, the null hypothesis was not rejected for any of the four measures.

Hypothesis III

It was hypothesized that there would be no difference in scores between male and female subjects who were shown the film and male and female subjects who were not.

A summary of the results and analyses appears in Tables 5a to 5e. The null hypothesis was not rejected on three of the four measures. Table 5c shows that there was a significant interaction effect between subject sex and treatment on response latency. The result indicates that the treatment may have produced a different effect in one sex or the other. To test out this possibility a Scheffé Multiple Comparison of Means of Main Effects was carried out. No significant differences were discovered between

Table 4a

Means, Standard Deviations Comparing Subject Sex and Confederate Sex for Measures: Number of Responses, Response Latency and Total Time

Condition (SS/CS)	N	Measure					
		# Response		Latency		Total Time	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
M/M	16	3.44	2.06	28.11	16.31	80.16	37.35
F/M	20	3.15	3.20	38.69	38.35	90.37	43.29
M/F	17	3.41	2.15	36.38	36.33	87.69	38.69
F/F	19	4.53	4.55	37.21	32.41	92.69	34.55

Table 4b

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Confederate Sex on Measure: Number of Responses

Source	df	MS	F	P
A (Subject Sex)	1	9.68	0.936	0.34
B (Confed. Sex)	1	3.10	0.300	0.59
Error	69	10.35		

Table 4c

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Confederate Sex on Measure: Response Latency

Source	df	MS	F	P
A (Subject Sex)	1	160.00	0.153	0.70
B (Confed. Sex)	1	575.09	0.548	o.46
Error	69	1048.92		

Table 4d

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Confederate Sex on Measure: Total Time

Source	df	MS	F	P
A (Subject Sex)	1	404.49	0.273	0.60
B (Confed. Sex)	1	1037.48	0.701	0.41
Error	69	1479.43		

Table 4e

Contingency Table for Comparison of Subject Sex and Confederate Sex on Measure: Getting Pencil Back

			Confederate Sex	
			M	F
Subject Sex	M	success	11	8
		failure	5	12
	F	success	8	10
		failure	9	9

Table 5a

Means, Standard Deviations Comparing Subject Sex and Treatment (Modeling or Control) Condition for Measures: Number of Responses, Response Latency, and Total Time

Condition (SS/Treatment)	N	Measure					
		# Response		Latency		Total Time	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
M/MOD	20	3.30	1.84	24.77	15.58	81.59	42.56
F/MOD	16	3.37	2.60	42.17	40.64	89.44	39.37
M/CONT	16	3.25	3.60	45.53	40.40	91.14	38.50
F/CONT	20	4.50	4.26	32.53	27.55	91.10	34.32

Table 5b

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Treatment Conditions on Measure: Number of Responses

Source	df	MS	F	P
A (Subject Sex)	1	7.80	0.756	0.20
B (Treatment)	1	5.14	0.498	0.24
Error	69	712.09		

Table 5c

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Treatment Conditions on Measure: Response Latency

Source	df	MS	F	P
A (subject Sex)	1	86.69	0.086	0.34
B (Treatment)	1	549.13	0.547	0.23
A x B	1	4108.75	4.091	0.05*
Error	68	1004.30		

* Significant for a two-tailed test.

Table 5d

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Treatment Conditions on Measure: Total Time

Source	df	MS	F	P
A (Subject Sex)	1	271.44	0.183	0.34
B (Treatment)	1	559.00	0.376	0.27
Error	69	1486.36		

Table 5e

Contingency Table for Comparison of Subject Sex and Treatment Condition on Measure: Getting Pencil Back

			Treatment	
			MOD	CONT
Subject Sex	M	success	12	7
		failure	8	10
	F	success	8	9
		failure	8	10

means of either the sex groups or the treatment groups.

Hypothesis IV

It was postulated that there would be no difference in scores between male and female subjects who were told to stand up for their rights in the testing situation, and male and female subjects who were given no special instruction.

A summary of the results and analyses is presented in Tables 6a to 6e. In this instance the null hypothesis was not rejected.

C. Summary of Results

In summary, the foregoing analysis of the data collected suggests that:

1. The twenty minute modeling package used in this study was not powerful enough to significantly affect the performance of Grade 7 students in the specific test situation on the outcome measures used, that is, number of responses, response latency, total time taken to get the pencil back, and finally, simply the success or failure of the subject to regain possession of the pencil.
2. Reminding subjects just prior to entering the test situation to "stand up for their rights" did not significantly alter performance in the test situation on the specified outcome measures.

Table 6a

Means, Standard Deviations Comparing Subject Sex (M or F) and Test (Maximum or Minimum) Conditions for Measures: Number of Responses, Response Latency, and Total Time

Condition (ss/Test cond.)	N	Measure					
		# Response		Latency		Total Time	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
M/Max	16	3.25	1.88	30.97	28.95	84.00	43.31
F/MAX	17	3.70	2.57	38.81	38.71	90.71	37.40
M/MIN	20	3.30	3.29	36.41	32.52	87.30	39.22
F/MIN	19	4.26	4.41	35.04	29.74	90.05	35.96

Table 6b

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Test Conditions on Measure: Number of Responses

Source	df	MS	F	P
A (Subject Sex)	1	9.603	0.926	0.17
B (Test Cond.)	1	1.660	0.160	0.35
Error	69	10.371		

Table 6c

Summary of Two-Way Analysis of Variance Comparing Subject Sex Test Conditions on Measure: Response Latency

Source	df	MS	F	P
A (Subject Sex)	1	145.85	0.138	0.36
B (Test Cond.)	1	11.85	0.011	0.46
Error	69	1057.08		

Table 6d

Summary of Two-Way Analysis of Variance Comparing Subject Sex and Test Conditions on Measure: Total Time

Source	df	MS	F	P
A (Subject Sex)	1	375.14	0.251	0.31
B (Test Cond.)	1	30.73	0.021	0.45
Error	69	1094.02		

Table 6e

Contingency Table for Comparison of Subject Sex and Test Conditions on Measure: Getting Pencil Back

			Test	
			MAX	MIN
Subject Sex	M	success	8	11
		failure	8	9
	F	success	8	10
		failure	9	9

3. Further analysis of the data to determine if there were differential effects on boys or girls of showing the video-tape, giving the different instructions, or pairing subjects with a male or female confederate yielded no significant results.

Discussion

Several factors may have accounted for the failure to obtain statistically significant results in this study. These factors relate to the treatment package used, to the outcome measures and to the test situation, as well.

A. Treatment Package

The study consisted of only a single brief exposure to treatment. Had there been a repeated exposure to the video-tape with less passive involvement on the part of subjects in the treatment, it is likely that more positive results would have been realized. For example, had subjects been allowed to role play one or two of the modeled situations, the literature reviewed in Chapter II suggests that performance would have been enhanced. Also, if subjects had been encouraged to discuss the advantages and problems associated with behaving as the models did, differences may have been noted.

Although comments were not directly solicited, students said that they enjoyed watching the tape, found it interesting and that the problem situations presented were

relevant to their experiences. However, a frequent comment was that the antagonists (ie. role players other than the models) did not appear realistic in that they gave up much too easily. Similar situations in the students' experience had not been resolved nearly so easily or quickly. For this reason, they found it hard to see where the behaviors exhibited by the models could be effective for them. Thus, identification with the model and the consequent matching of the model's behavior would not have been maximized. This corroborates the literature reviewed in Chapter II which suggests the use of a "coping" rather than a "mastering" model to induce matching behavior. Perhaps if the models on the video-tape had displayed more anxiety or if a higher degree of resistance had been shown by the other role players, the situation as acted out would have seemed more credible and viewers would have been more likely to imitate the model's behavior.

Finally, subjects were given no indication as to the object of their viewing the video-tape (ie. to teach them how to stand up for their rights). Had they been advised that they were participating in a program specifically designed to teach them how to respond with appropriate assertion in certain conflict situations, it is possible that significance may have been achieved. Indeed most subjects in treatment studies reviewed in Chapter II were completely aware of the nature of the treatment.

B. Outcome Measures and Method of Rating

The outcome measures used for this study have some very definite drawbacks. For example: "number of requests" was chosen to measure persistence which has a strong intuitive link with assertiveness. However, the difficulty of using this as a measure of assertiveness is exemplified by the question: Is the subject who asked 20 times for her pencil more assertive than the subject who asked 5 times? Obviously she is persistent but the lack of effectiveness and satisfaction indicates a lack of assertiveness in Alberti and Emmons' terms (Alberti & Emmons, 1971). It is this author's opinion that the quality of the response would be more indicative of assertiveness. The videotaped recordings of the test situation show that some subjects made attempts to imitate the modeled behaviors by remaining calm and controlled, stating their feelings about the situation and suggesting a solution to the confederate. Others responded by demanding, pleading, or merely suggesting that the confederate give the pencil back, at the same time displaying emotions that ranged from almost total apathy to intense anger and frustration. It is suggested that in future studies an analysis of types of responses be used rather than a quantitative measure.

With respect to the two "timed" measures (latency and total time), the broad variability which occurred within groups suggests that these measures do not effectively discriminate between groups and the inadequacies of these as indicators of assertiveness should be seriously considered

before adopting them for use in future studies.

Because of the problems presented by the measures used in this study and similar problems anticipated with other types of behavioral measures, it is suggested that "assertiveness" would best be measured as an overall quality separate from the individual behaviors. Thus a type of rating where judgments are made concerning the degree of assertiveness demonstrated by the subject is useful. Another possibility would be to systematically compare the tapes of subjects who had received treatment with control subjects by showing them to trained judges two at a time and asking them to decide which subject was more assertive.

C. Test Situation

Although the test situation (ie. needing to confront another person with the fact that his behavior is inhibiting one's own chances to complete the project) seemed sufficient to elicit the behaviors associated with assertiveness for the purposes of this study, it seems that the instructions to "stand up for your rights" were not powerful enough to cause a change in subject's behavior. Had the experimenter emphasized these instructions more and helped subjects mentally practice the behaviors demonstrated by the film, it is possible that differences would have been found between those subjects who received no special instructions.

CHAPTER V

Summary and Conclusions

A. Summary

The general purpose of this study was to test the effectiveness of a twenty-minute modeling tape in teaching assertion skills to junior high school children (Grade 7) over a short period of time. Two general hypotheses were tested: one which predicted that children who had viewed the tape would be more assertive in a specified test situation than a control group, and a second which proposed that telling children to "stand up for their rights" would improve their performance in the test situation.

Behaviors associated with assertiveness were observed and rated. Results were analysed and demonstrate that no statistically significant differences existed between the performances of the groups on those measures under the various conditions. Neither the video-tape nor the exhortation to be assertive produced significant changes in the behavior of the subjects on four measures in a test situation where they were required to get a pencil back from a peer in order to complete a task. The four measures were: the number of requests for the pencil, the time taken before the first response was made, the time taken to regain the pencil, and success or failure at regaining the pencil. In addition to the two general investiga-

tions it was further tested to see if treatment conditions, test conditions or sex of the confederate would affect boys differently than girls. Analysis of the results did not support to these hypotheses.

B. Conclusions

That lack of assertiveness is a prevalent problem is supported by the preponderance of studies which have been addressed to this topic. Several studies have concentrated on the lack of assertiveness which seems to begin to develop in children soon after they start to school and continues to develop through adolescence and into adulthood (Rathus & Ruppert, 1973). If a program were to be developed which would effectively and efficiently deal with this problem, and if it were implemented in the school systems, the potential both to the individual and to the people with whom he or she comes in contact are self-evident. The implications of this type of study for the development of such a program are also quite clear.

If has been shown that either or both of two conditions exist - that is, the treatment used in this study did not cause Grade 7's to act more assertively, or that outcome measures used in this study are not appropriate to measure assertiveness. To counteract the first condition it has been suggested that the treatment be extended over a longer period of time and that the video-tape be presented in tandem with

another procedure such as role playing or group discussion. Another alternative which has been proposed is the development of a program designed to teach individually the specific behavioral components of assertiveness. To counteract the second condition, it has been suggested that rating individual behaviors is not satisfactory. A judgment of overall assertiveness would seem to be more appropriate.

"Assertiveness" seems to be something more than possessing in one's repertoire those behaviors usually associated with being assertive. It involves a motivational state wherein one recognizes first of all that his rights or freedom are being abused. Then he must anticipate that performing those behaviors deemed "assertive" will lead to a solution which is both self-satisfying and self-enhancing. It is only at this point that he can act. Any assertiveness training program should take this into account in order to be more effective.

C. Suggestions for Further Research

1. Further research is needed in the area of extending the length of treatment and its long-term effects.
2. Studies in which a program is used with previously-identified low or non-assertive subjects would be of value.
3. The literature on modeling in assertiveness training suggests the use of other procedures in addition to

modeling to teach assertiveness. Investigation as to the most efficacious methods for use in the classroom is badly needed.

4. A study in which two programs - one designed to teach "assertiveness" and one designed to teach components of assertiveness, eg. appropriate body posture, appropriate emotion, use of "I" messages, statement of feeling, persistance, etc. - were compared would prove useful to those trying to teach assertiveness.
5. Further studies to determine the nature of assertiveness and those conditions which foster or hinder its development are needed. Such studies bear many implications not only for child rearing practices but for teaching methods as well.
6. The role of anxiety in assertiveness and how to deal effectively with anxiety in both non-therapeutic and therapeutic settings warrants further investigation.

In conclusion, although the analysis failed to demonstrate that the video-tape or the instructions did produce changes in the assertive behavior of Grade 7 students, I would not advocate the abandonment of the video-tape as one component of an assertiveness training program. The film has face validity in that the situations which are set up are common ones and viewers find it easy to identify with one or more of them. It possible use as a discussion starter was evident in the student's reaction

both to the situations themselves and to the behavior of the role players (i.e. identification with the situations was each; identification with the actors was not). Further studies might investigate the inclusion of this video-tape in assertiveness training program and compare it to a program where the tape was not included.

FOOTNOTES

FOOTNOTES

[1]The modeling video-tape used for this study is entitled "Assertiveness Training Situations", and is located in the Audio Visual Media Center Tape Library, Faculty of Education, The University of Alberta, Accession #A0224. The tape will be made available for reproduction by contacting Dr. Peter Calder in the Department of Educational Psychology.

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APPENDICES

APPENDIX A: Sample of Letter Sent to Parents

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY
EDUCATION CENTRE—NORTH WING
TELEPHONE (403) 432-5649

FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA
CANADA T6G 2G5

February 14, 1977

To Parents or Guardians of Students at Holy Cross School

Grade seven students at Holy Cross School have been selected to take part in a study that is being conducted by the University of Alberta. The general purpose of the study is to develop a program for teaching children appropriate social behavior.

The study will be taking place in the school. Each child will be out of the class for about 45-60 minutes on the day of the study which will be both an educational and enjoyable experience for the student. The results will be used only for research purposes, and all data will remain strictly confidential and will be destroyed on completion of the research.

Since the students will be video-taped, and in order that we may be sure that we are not proceeding contrary to your wishes as a parent, may we ask you to complete this form letter today if you DO NOT wish your son or daughter to participate in this study. Please have your child return this letter to the office of the Principal in the envelope provided.

I DO NOT wish my child, _____
(print full name)
to participate in this study.

_____
(signature of parent or guardian)

_____
(date)

Thank you for your co-operation.

Mr. N. Gour
Principal
Holy Cross School

Mr. Ted Shaw
Dept. of Educational Psychology
University of Alberta

APPENDIX B: Instructions to Subjects re: "Maze" Study

"Good morning (afternoon) kids. My name is Pat and I'm doing some work for The University of Alberta. I'm doing a study comparing how boys and girls in Grade 7 and 8 work on a certain maze puzzle. Each of you will be competing one at a time against a Grade 8 student to see who can do more of the puzzle in 3 minutes. Your work is very important to me, so try your best and work as quickly as you can. Here is a maze for you to practice on while you wait. There are at least three different ways of doing the puzzle. See how many you can find.

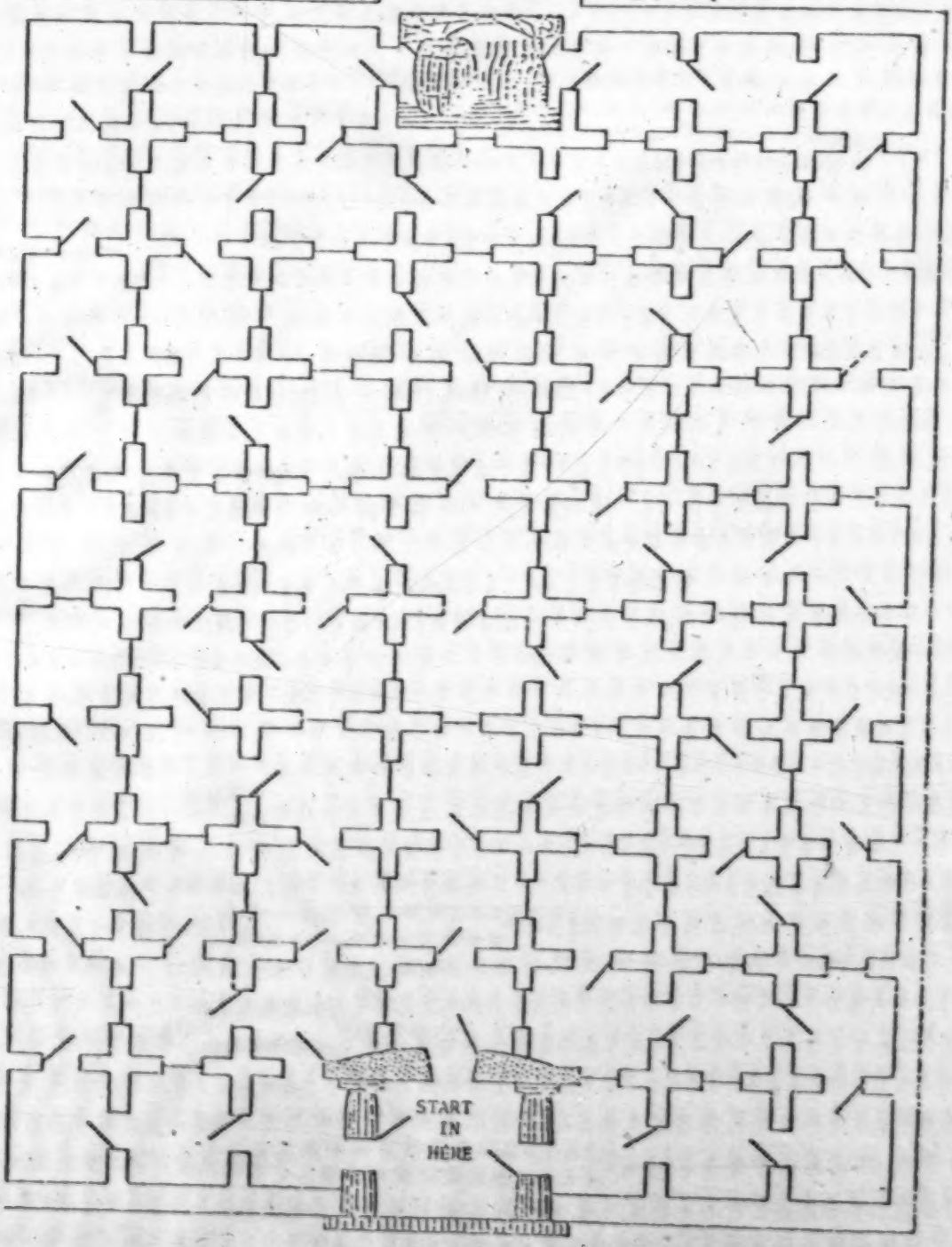
After you have finished here with me please do NOT tell your friends or classmates what you did or saw. It's very important that they don't know until after all the Grade 7's have had a chance to try. I'll be back in a couple of minutes to start taking you one at a time to the test room.

Thank you for your cooperation."

APPENDIX C: Practice Maze Puzzle

(Reproduced from Shepherd, 1973 - reduced)

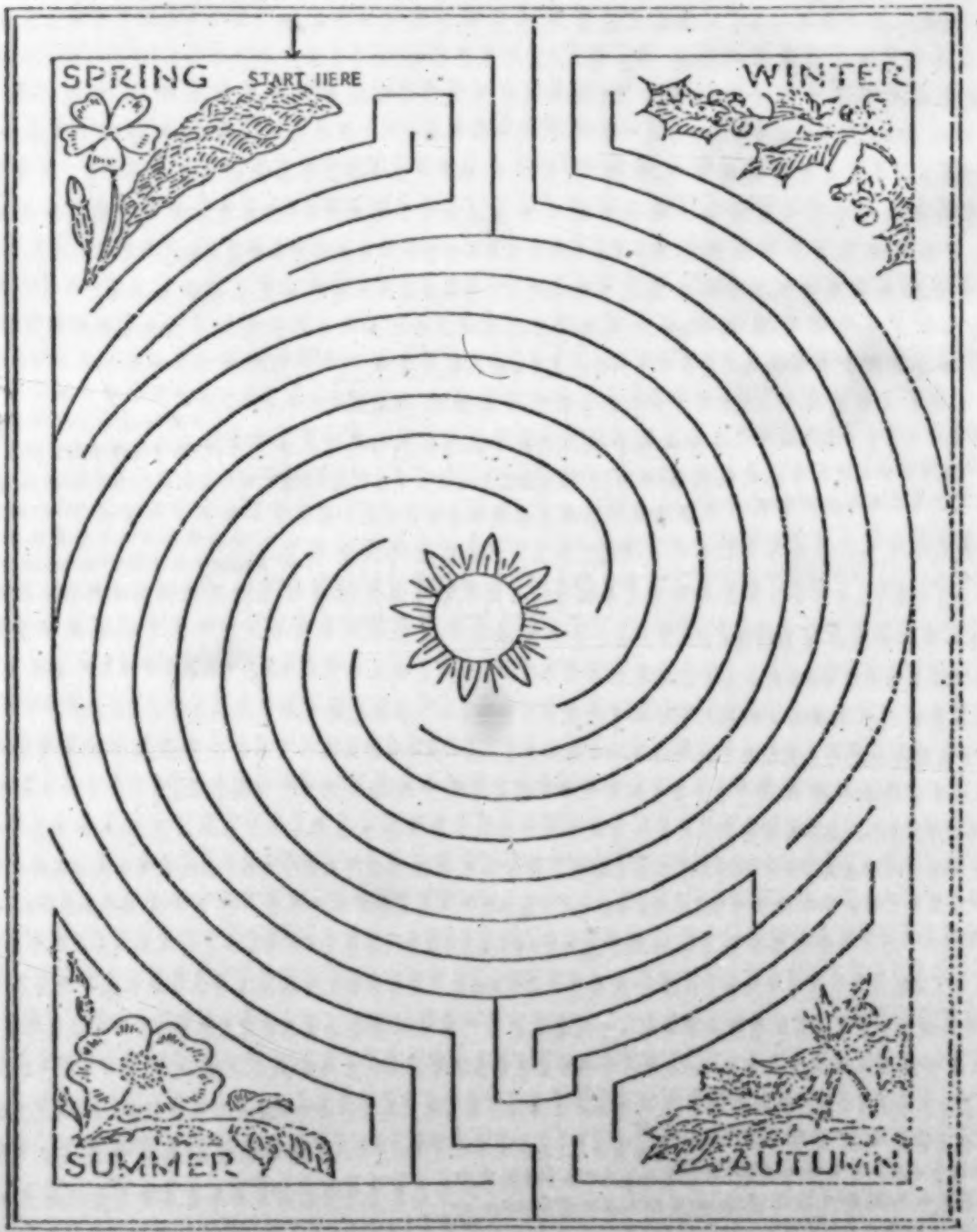
Find your way from the open bottom square to the wine bottles at the top as fast as you can, without crossing or retracing your path.



APPENDIX D: Test Maze Puzzle

(Reproduced from Shepherd, 1973 - reduced)

Start at the SPRING and run through the seasons in order(SUMMER, Autumn and round to WINTER), without crossing or retracing your path.



APPENDIX E: Questionnaire

Name _____ School _____

Group _____

What would you do first if... (Check (/) the most appropriate answer.)

1. A friend of yours kept bugging you to go to the store after shool when you know you are not allowed to go?

   _____ tell him you can't go and that's it

   _____ ignore his request

   _____ go to the store anyways

2. Somebody in your class messed up the board after you had just worked hard at cleaning it?

   _____ clean it again

   _____ tell the teacher

   _____ tell him to clean it

3. The math teacher explains something new in class that you don't really understand?

   _____ ask the teacher during the class to explain it again

   _____ ask your friend or parents to help you

   _____ forget about it

4. Somebody in a movie takes your good seat when you go to buy a ticket

   _____ take another seat

   _____ tell him it's your seat and ask him to move

   _____ push him off

5. Somebody in your class accuses you of having taken $5 that belongs to them, and ask you to empty your pockets (even though you didn't take it)?

   _____ empty your pockets

   _____ tell him he can't search you

   _____ tell the teacher

APPENDIX F: Rating Scale

Subject sex: M F Tape No. _____

Confederate sex: M F Subject No. _____

Rate the child according to the behaviors below:

1. number of requests: _____

2. latency of response: _____ secs.

3. total time to get pencil back: _____ secs.
(maximum: 120)

4. gets pencil back: Yes _____ No _____

APPENDIX G: Distinction Between Assertion and Aggression

A. Excerpted from Chittenden's (1942) Rating Scale (p. 84):

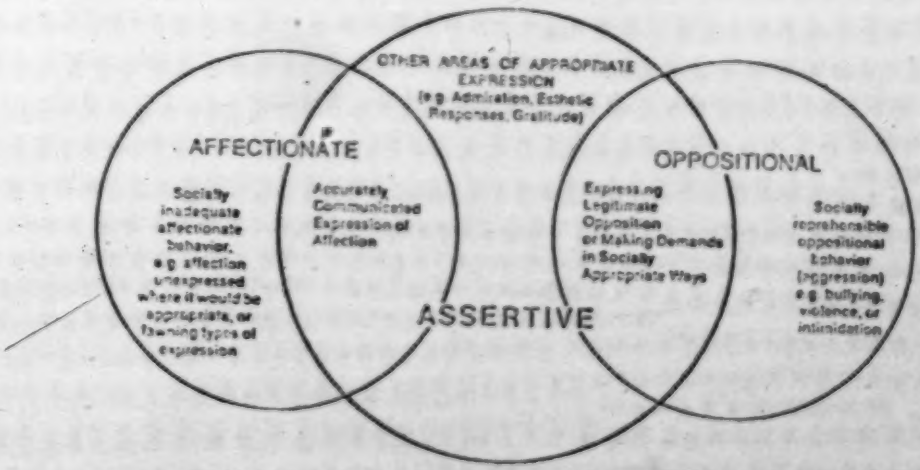
Category A (Aggression): This category includes the following types of behavior when they are used in initiating social contacts: verbal behavior such as commanding, giving directions, and threatening; physical behavior such as grabbing toys, hitting, kicking, pushing, and threatening by gesture.

Category B (Assertion): This category includes suggestions for the joint use of material, suggestions for taking turns, bargaining, reasoning, and asking another child for a toy; agreements to take turns and to use material jointly and the actual carrying out of such agreements.

(labelling of categories is this author's own).

B. The Interrelations Between Assertive and Other Categories of Behavior (Wolpe, 1973, p.89):

Assertive behavior, defined as expressing emotions other than anxiety in a socially acceptable way, involves many categories of emotional behavior. The most common of these categories is oppositional behavior (e.g. standing up for reasonable rights). Types of oppositional behavior outside the assertive category are the provocative, the aggressive, the violent, and, often, the sarcastic.


OTHER AREAS OF APPROPRIATE EXPRESSION
(e.g. Admiration, Esthetic Responses, Gratitude)
AFFECTIONATE
Socially inadequate affectionate behavior, e.g. affection unexpressed where it would be appropriate, or fawning types of expression
Accurately Communicated Expression of Affection
ASSERTIVE
Expressing Legitimate Opposition or Making Demands in Socially Appropriate Ways
OPPOSITIONAL
Socially reprehensible oppositional behavior (aggression) e.g. bullying, violence, or intimidation

Interrelations between assertive, oppositional, and affectionate categories of behavior. (Courtesy of Graphic Communications, Eastern Pennsylvania Psychiatric Institute, Philadelphia.)